

REMARKS

Previously, claims 1-8 were pending in this non-provisional application. After the applicant has reviewed the office action from the examiner, the claims have been amended. Claims 1, 5, 6, 7, and 8 are amended, claim 9 is added, and claims 2-

4 are canceled.

In response to the examiner's comments in the office action, first, the examiner is correct regarding claim 6 and its antecedent claim. Claim 6 is amended to have antecedence to claim 5.

Second, the applicant regards this invention as a solid cylindrical lead body with a retroreflective chamber punched into the top of the body. The lead permits precise and high reflectivity of the walls of the chamber.

Third, the patent to Bleier, No. 5,122,901, discloses three mutually orthogonal plates 55 located in a receptacle 25 sealed into a casing 12. As further shown in FIG. 6, the plates 55 are separate and overlap in joints between them. Bleier does not disclose the reflectivity of the receptacle. Bleier does disclose that the plates 55 are inserted into the receptacle 25, see col. 4 lines 61-65. However, the present invention lacks plates and rather has mutually orthogonal walls precisely punched into a solid body and then polished. Further, the perimeter of the body stabilizes and protects the walls of the chamber. Claim 1 is amended to clarify the reflection by the walls in the present invention.

Fourth, regarding claim 5, the patents to Bleier '901 and to Smith, P. No. 6,155,689 disclose a reflective film having multiple layers. In the '689 patent, the reflective film is punched by a gang of die punches 104. The die punches 104 penetrate through the film 100. The particles 50 released from the film 100 are collected and adhered onto other film 110. The films 100 and 110 are then assembled to form the Smith invention.

The examiner asserts that the '689 patent teaches a method to eliminate adhering triangulated surfaces. In contrast, the present invention has three

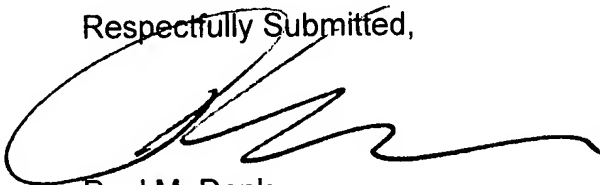
triangulated and interconnected surfaces punched as one cube corner into a blank. The present invention does not adhere separate surfaces or plates into the blank. The present invention does apply a transparent coating of material to make the reflector rugged for field use and to have proper reflectivity. Claim 5 is amended to clarify that the coating is applied not by a layer of film but by other means such as deposition of particulate material that forms a layer upon the surfaces.

Fifth, regarding claims 4, 6, and 7, the patents to Bleier '901 and to Smith, P. '689 disclose a hollow retroreflector and a reflective film having multiple layers, respectively. The '901 patent discloses rubber as the material for the receptacle 25 and plastic as the material for the casing assembly 12, see col. 5 line 50 and col. 6 line 47 respectively. The '689 patent then discloses polymers as the retroreflective film 10, see col. 3 lines 8 and 37. The '901 and '689 patents teach of shock absorption, weight reduction, and flexible reflectivity in film. In contrast, the present invention claims lead as a material for the reflector. When precisely punched and finished, lead forms a reflective surface of sufficient flatness for surveying use. The body partially deforms under punching yet retains its overall cylindrical shape. Lead remains a heavy metal and thus diverges from the weight reduction and flexible film aspects taught by the prior art. Applicant asserts that lead is not an obvious material choice for an optically effective surveying reflector.

This application as amended withstands the prior art as cited by the examiner, whether the prior art be applied individually, or in combination, for use either anticipating or rendering obvious the claimed subject matter of the applicant's invention. Thus, obviousness cannot be established by combining teachings of the prior art to produce the claimed invention, absent some teaching, suggestion, or incentive supporting that combination. See the cases of *Ex parte Beuther*, 71 USPQ2 1313, (Bd. Pat. App. & Int. 2003) and *In re Geiger*, 815 F2d. 686 (Fed. Cir. 1987).

In view of the foregoing amendments and remarks, all the claims now active in this application are believed to be in condition for allowance. Favorable action by the examiner is respectfully requested.

Respectfully Submitted,

A handwritten signature in black ink, appearing to be 'P. Denk', with a large, sweeping initial 'P' and a long horizontal flourish extending to the right.

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